

REMARKS

This is intended as a full and complete response to the Office Action dated July 14, 2005, having a shortened statutory period for response set to expire on October 14, 2005. Please reconsider the claims pending in the application for reasons discussed below.

SPECIFICATION

The Specification has been amended to refer to Fig. 8 when describing the substrate at position "G".

ABSTRACT

The Abstract has been amended to remove reference to the term "invention" as indicated.

REJECTIONS

A. Claims 28-30

Claims 28-30 stand rejected under 35 U.S.C. §112, second paragraph. In response, the Applicants have cancelled claims 28-30 without prejudice. Thus, the Applicants respectfully request the rejection be withdrawn.

B. Claims 1-4, 8-12, 17 and 20

Claims 1-4, 8-12, 17 and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,360,005 to *Aloni, et al.* (hereinafter "*Aloni*"), in view of U.S. Patent No. 5,305,391 to *Gomibuchi* (hereinafter "*Gomibuchi*"). The Applicants respectfully disagree, but have amended claims 1 and 10 to more clearly recite certain aspects of the invention. Claim 20 has been cancelled without prejudice.

Claims 1 and 10 recites elements not taught or suggested by the combination of *Aloni* and *Gomibuchi*. *Aloni* teaches acquiring images on a substrate surface using a scanner. Scanned data is provided to a registration subsystem that aligns an inspected channel with a registration channel to compensate for irregular velocity of the scanner. *Aloni* does not teach or suggest a controller having a program, that when executed,

performs a method of determining trigger intervals for at least two trigger signals for the acquisition of at least two images on a substrate surface moving with non-linear motion in a first direction, wherein a first trigger interval corresponds to a first image position and a second trigger interval corresponds to a second image position, and wherein the at least two images have substantially equal width in the first direction, as recited by claim 1; or a method of substrate imaging that includes determining trigger intervals for at least two trigger signals for the acquisition of at least two images on a substrate surface moving with non-linear motion in a first direction, wherein the at least two images have substantially equal width in the first direction, as recited by claim 10.

Gomibuchi also does not teach or suggest acquiring at least two images on a substrate surface moving with non-linear motion in a first direction, wherein a first trigger interval corresponds to a first image position and a second trigger interval corresponds to a second image position, and wherein the at least two images have substantially equal width in the first direction. Thus, *Gomibuchi* does not teach or suggest a modification to *Aloni* that would yeild a controller having a program, that when executed, performs a method of determining trigger intervals for at least two trigger signals for the acquisition of at least two images on a substrate surface moving with non-linear motion in a first direction, wherein a first trigger interval corresponds to a first image position and a second trigger interval corresponds to a second image position, and wherein the at least two images have substantially equal width in the first direction, as recited by claim 1; or a method of substrate imaging that includes determining trigger intervals for at least two trigger signals for the acquisition of at least two images on a substrate surface moving with non-linear motion in a first direction, wherein the at least two images have substantially equal width in the first direction, as recited by claim 10.

Therefore, the Applicants submit that claims 1 and 10, and claims 2-4, 6-9, 11-12 and 17 depending therefrom, are patentable over *Aloni* in view of *Gomibuchi*. Accordingly, the Applicants respectfully request the rejection be withdrawn.

C. **Claims 6-7, 13-16, 19, 21-26 and 31-33**

Claims 6-7, 13-16, 19, 21-26 and 31-33 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Aloni* in view of *Gomibuchi* in further view of U.S. Patent No. 6,388,414 to *Kobayashi* (hereinafter "*Kobayashi*"). The Applicants respectfully disagree, but have amended claims 1, 10 and 32-33 to more clearly recite certain aspects of the invention. Claims 20-26 and 31 have been cancelled without prejudice.

The patentability of independent claims 10 over the combination of *Aloni* and *Gomibuchi* has been discussed above. Claim 32 is patentable over the combination of *Aloni* and *Gomibuchi* for at least the same reasons as discussed above. Additionally, the combination of *Aloni* and *Gomibuchi* does not teach or suggest, for a substrate surface moving linearly at a non-constant velocity, receiving at a first sensor of a time-domain camera a portion of optical signals from at least one image position, determining an integration interval for a second sensor of the time-domain camera positioned in a direction of travel corresponding to the non-linear movement of the substrate surface by determining a number of stepper motor steps from a start trigger point to the second sensor to obtain optical signals over an substantially equal sample distance as the optical signals obtained by the first senor, as recited by claim 33.

Moreover, *Kobayashi* does not teach or suggest acquiring at least two images on a substrate surface moving with non-linear motion in a first direction, wherein a first trigger interval corresponds to a first image position and a second trigger interval corresponds to a second image position, and wherein the at least two images have substantially equal width in the first direction. Thus, *Kobayashi* does not teach or suggest a modification to the combination of *Aloni* and *Gomibuchi* that would yield a method of substrate imaging that includes determining trigger intervals for at least two trigger signals for the acquisition of at least two images on a substrate surface moving with non-linear motion in a first direction, wherein the at least two images have substantially equal width in the first direction, as recited by claims 10 and 32; or, for a substrate surface moving linearly at a non-constant velocity, receiving at a first sensor of a time-domain camera a portion of optical signals from at least one image position, determining an integration interval for a second sensor of the time-domain camera positioned in a direction of travel corresponding to the non-linear movement of the

substrate surface by determining a number of stepper motor steps from a start trigger point to the second sensor to obtain optical signals over an substantially equal sample distance as the optical signals obtained by the first senor, as recited by claim 33.

Therefore, the Applicants submit that claims 10 and 32-33, and claims 13-16 and 19, that depend from claim 10, are patentable over *Aloni* in view of *Gomibuchi*, and in further view of *Kobayashi*. Accordingly, the Applicants respectfully request the rejection be withdrawn.

NEW CLAIMS

New claims 34-45 have been added. The Applicants believe that these claims are fully supported by the specification, and that no new matter has been entered. Furthermore, the Applicants submit that claims 34-45 are patentable over the references of record for at least the same reasons as discussed above. Accordingly, allowance of these claims is respectfully requested.

CONCLUSION

Thus, the Applicants submit that all claims now pending are in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issuance are earnestly solicited.

If, however, the Examiner believes that any unresolved issues still exist, it is requested that the Examiner telephone Mr. Keith Taboada at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,


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